

We Claim:

1. A process for preparing fluorochemical monoisocyanates comprising reacting at least one fluorochemical alcohol represented by the formula $C_nF_{2n+1}SO_2NCH_3(CH_2)_mOH$, wherein n = 2 to 5, and m = 2 to 4, with 4,4'-diphenylmethane diisocyanate (MDI) in a solvent in which the resulting fluorochemical monoisocyanate is not soluble; wherein the molar ratio of fluorochemical alcohol:MDI is from about 1:1 to about 1:2.5.
2. The process of claim 1 wherein n = 2 to 4.
3. The process of claim 2 wherein n = 4.
4. The process of claim 2 wherein said fluorochemical alcohol is selected from the group consisting of $C_2F_5SO_2NCH_3(CH_2)_2OH$, $C_4F_9SO_2NCH_3(CH_2)_2OH$, $C_4F_9SO_2NCH_3(CH_2)_4OH$, and mixtures thereof.
5. The process of claim 4 wherein said fluorochemical alcohol is selected from the group consisting of $C_4F_9SO_2NCH_3(CH_2)_2OH$, $C_4F_9SO_2NCH_3(CH_2)_4OH$, and mixtures thereof.
6. The process of claim 5 wherein said fluorochemical alcohol is $C_4F_9SO_2NCH_3(CH_2)_2OH$.
7. The process of claim 1 wherein said solvent is a nonpolar solvent.
8. The process of claim 7 wherein said solvent is a non-aromatic hydrocarbon or halogenated solvent.

9. The process of claim 1 said solvent is selected from the group consisting of methyl nonafluoroisobutyl ether, methyl nonafluorobutyl ether, petroleum ether, *n*-heptane, and mixtures thereof.

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10. The process of claim 1 wherein said solvent has a solubility parameter of less than about $8.3 \text{ (cal/cm}^3\text{)}^{1/2}$ and a hydrogen bonding index of less than about 4.

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11. The process of claim 1 wherein said molar ratio of fluorochemical alcohol:MDI is from about 1:1 to about 1:2.

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12. The process of claim 11 wherein said molar ratio of fluorochemical alcohol:MDI is from about 1:1.1 to about 1:1.5.

13. The process of claim 1 wherein said fluorochemical alcohol and said MDI are reacted in the presence of a catalyst.

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14. The process of claim 13 wherein said catalyst is an organotin compound or a tertiary amine.

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15. The process of claim 14 wherein said catalyst is dibutyltin dilaurate.

16. A fluorochemical isocyanate composition prepared by the process of claim 1 wherein said composition comprises greater than about 85% monoisocyanate.

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17. The fluorochemical isocyanate composition of claim 16 wherein said composition comprises greater than about 90%

monoisocyanate.

18. The fluorochemical isocyanate composition of claim
17 wherein said composition comprises greater than about 95%
5 monoisocyanate.

19. The process of claim 1 further comprising reacting
the resulting fluorochemical monoisocyanate with a hydroxy
alkyl acrylate.

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